

LPTM630

User's Guide



InFocus®

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Safety Certifications

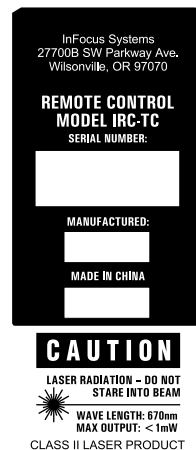
UL, CUL, TÜV, NOM, IRAM

EN 55022 Warning

This is a Class A product. In a domestic environment it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, meeting room or auditorium.

Remote Control Warning

Laser radiation class II product; wavelength 670nm; maximum output 1mW.
Remote control complies with applicable requirements of 21 CFR 1040.10 and 1040.11. Remote control complies with applicable requirements of EN 60 825-1: 1994 +A11



Declaration of Conformity

Manufacturer: InFocus Corporation

27700B SW Parkway Ave. Wilsonville, Oregon 97070 USA

European Office: Olympia 1, NL-1213 NS Hilversum, The Netherlands

We declare under our sole responsibility that the LP630 projector conforms to the following directives and norms:

EMC Directive 89/336/EEC, Amended by 93/68/EEC

EMC: EN 55022

EN 55024

EN 61000-3-2

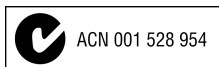
EN 61000-3-3

Low Voltage Directive 73/23/EEC, Amended by 93/68/EEC

Safety: EN 60950: 1992 + A1 + A2 + A3 + A4: 1997

August, 2001

Australian Certification C-tick mark



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SAFETY INSTRUCTIONS

Please read and follow all safety instructions provided **BEFORE** using your new projector. Failure to comply with safety instructions may result in fire, electrical shock, or personal injury and may damage or impair protection provided by the equipment.

Please save all safety instructions.

Safety Definitions:

- **Warning:** Statements identify conditions or practices that could result in personal injury.
- **Caution:** Statements identify conditions or practices that could result in damage to your equipment.

Safety Symbols



Attention: For information about usage of a feature, please refer to the User's Guide.



Warning: Hot surface. Do not touch.



An arrow pointing to the lamp door on the projector.



Warning: Laser Radiation. Do not stare into the laser beam.

Safety Terms:

- **Warning:** Don't look directly into the lens when the lamp is turned on.



• **Warning:** To replace the lamp, turn off the projector and unplug the power cord. To avoid burns, wait 30 minutes before opening the lamp door. Follow all instructions in the User's Guide.



• **Warning:** Please use the power cord provided. Connect the power cord to a receptacle with a protective safety (earth) ground terminal.

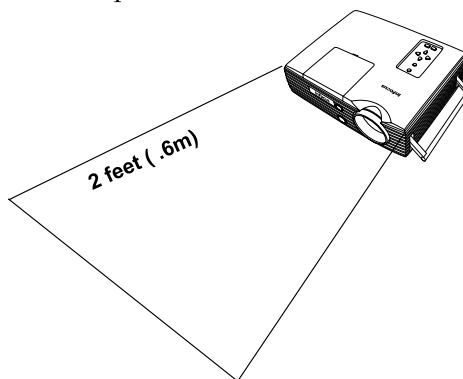


• **Warning:** Laser Radiation. Do not stare into the laser beam.

- **Warning:** Refer all service to qualified service personnel. Servicing your own projector will void the warranty.
- **Warning:** For ceiling installation. To prevent eye injury, wear protective eyewear before opening lamp door.
- **Caution:** Do not block ventilation openings.
- **Caution:** Do not set liquids on the projector. Spilled liquids may damage your projector.
- **Caution:** Do not place the projector on a hot surface or in direct sunlight.
- **Caution:** Do not drop the projector. Transport the projector in an InFocus-approved case; see "Optional Accessories" on page 47 for a list of cases.

Important Operating Considerations

Do not place the projector on a tablecloth or other soft covering that may block the vents. In the unlikely event of the bulb rupturing, thoroughly clean the area in front of the projector and discard any edible items placed in that area.



Customer Service

If you need assistance, call InFocus Customer Service directly at **1-800-799-9911**. Support is free between 6 a.m. and 6 p.m. PST, Monday through Friday. Support is available in North America after hours and weekends for a fee at 1-888-592-6800.

Or, send us an e-mail at **techsupport@infocus.com**.

In Europe, call InFocus in The Netherlands at **(31) 35-647-4010**.

In Asia, call InFocus in Singapore at **(65) 353-9449**.

INTRODUCTION

The InFocus® LP630™ multimedia projector is specifically designed for multipurpose use. It generates crisp, clear images using Liquid Crystal Display (LCD) technology, and features an M1-DA connector for easy, built-in digital/analog and USB connectivity. It is easy to connect, easy to use, easy to transport, and easy to maintain. The LP630 has native XGA 1024x768 resolution.

Image Resolution

The XGA resolution of the LP630 projected image is 1024x768. The projector can compress screen resolutions up to 1280x1024.

Compatibility

The projector is compatible with a wide variety of computers, including:

- IBM-compatible computers, including laptop's, up to 1280x1024 resolution.
- Apple® Macintosh® and PowerBook® computers up to 1280x1024.
- Most standard VCR's, DVD players, HDTV sources, camcorders and laser disc players.

Unpacking the Projector

The projector comes with the items shown in Figure 1. Check to make sure all are included. **Contact your InFocus dealer immediately if anything is missing.**

If you are experienced in setting up presentation systems, use the *Quick Start* card that was included in the shipping box. For complete details on connecting and operating the projector, refer to the User's Guide. User's Guides are also available for download from our website at **www.infocus.com**.

A registration card is included in the box. Register to receive product updates, announcements, and special offers from InFocus. Or, register online at **www.infocus.com/service/register** and you will be automatically entered to win free merchandise.



NOTE: The LP630 automatically expands 640x680 and 800x600 images to 1024x768. You can display these images at their native resolutions by turning off the *Resize* feature. See "Resize" on page 29 for more information.



NOTE: If you ceiling mount this projector, please attach the warning label that was included in the document package to the lamp door.

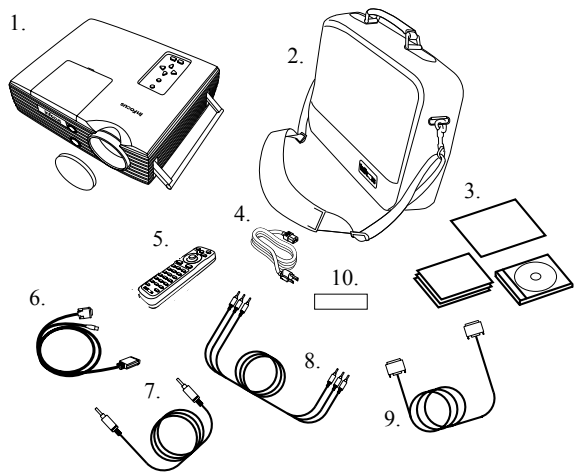


FIGURE 1

Shipping box contents

- | | |
|--|--|
| 1. Projector and lens cap | 6. M1-DA Analog Computer Cable |
| 2. Soft carry case | 7. Audio Cable |
| 3. User's Guide, quick start card, and User Guide CD | 8. Audio/Video Cable |
| 4. Power cord | 9. VESA Computer Cable |
| 5. Remote control | 10. Ceiling mount "Caution" label. See "Ceiling Mount" |

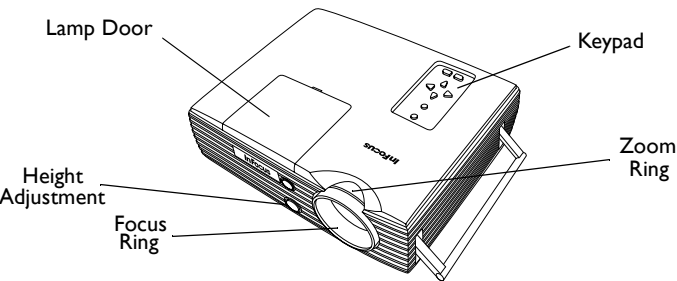


FIGURE 2

Side view of projector

Usage Guidelines

- Do not look directly into the projection lens when the lamp is turned on. The bright light may harm your eyes.
- Do not block the grills on the projector. Restricting the air-flow can cause it to overheat and turn off. If this happens you must wait a minute before attempting to turn the projector back on.
- Handle the projector as you would any product with glass components. Be especially careful not to drop it.
- Avoid leaving the projector in direct sunlight or extreme cold for extended periods of time. If this happens, allow the projector to reach room temperature before use.
- Transport the projector in a vendor-approved hard or soft case. Part numbers for these cases are listed on page 48.

If You Need Assistance

The first place to look for help is in this manual. Be sure to check the guidelines in “Troubleshooting” on page 41. Or, check the Service and Support section of our website at:

<http://www.infocus.com/service>

You'll find a Technical Library, FAQ's and support contacts including a technical support e-mail form.

If those sources don't answer your questions, call your InFocus dealer. You can call InFocus Customer Service directly at **1-800-799-9911**. Call between 6 a.m. and 6 p.m. PST, Monday through Friday. Service is available in North America after hours and on weekends for a fee at 1-888-592-6800.

In Europe, call InFocus in The Netherlands at **(31) 35-647-4010**.

In Asia, call InFocus in Singapore at **(65) 353-9449**.

Or, send us an e-mail at **techsupport@infocus.com**

Our World Wide Web address is **<http://www.infocus.com>**

Warranty

This product is backed by a limited two-year warranty. The details of the warranty are printed at the back of this manual. A long term warranty can be purchased from your InFocus dealer. Refer to “Optional Accessories” on page 47 for that part number.

SETTING UP THE PROJECTOR

- 1 Place the projector on a flat surface.
 - The projector must be within 10 feet (3m) of your power source and within 6 feet (1.8m) of your computer.
 - If you want to project from behind a translucent screen, set up the projector behind your screen. See “Rear Project” on page 33 to reverse the image.
 - If you are installing the projector on the ceiling, refer to the installation guide that comes with the Ceiling Mount Kit for more information. To turn the image upside down, see “Ceiling Project” on page 33.
- 2 Position the projector the desired distance from the screen.
 - The distance from the lens of the projector to the screen determines the size of the projected image. Figure 1 shows three projected image sizes using the lens at maximum zoom. For more information about image size, see “Projected Image Size” on page 53.

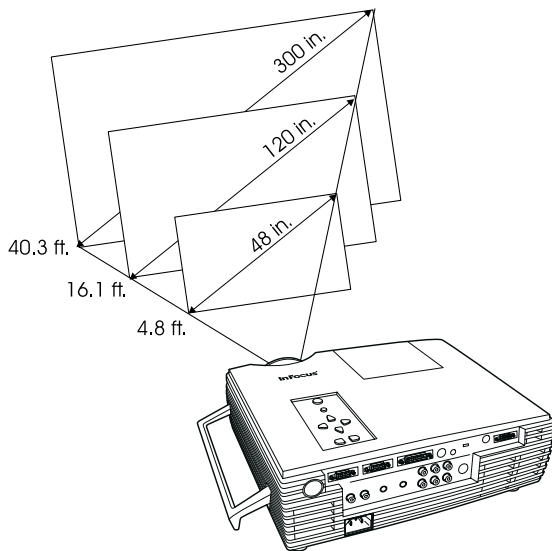


FIGURE 1

Projected image size at minimum zoom



NOTE: If you are connecting an older Macintosh computer that does not have a 15-pin connector, you must use MAC adaptors (ordered separately).

3 Make sure the projector and the computer are turned off.

- Before connecting any cables to either the computer or the projector, take a minute to familiarize yourself with all the cables and ports on both the components. Depending on which cables are shipped with your projector, connections may be different than illustrated.

Connecting a Computer

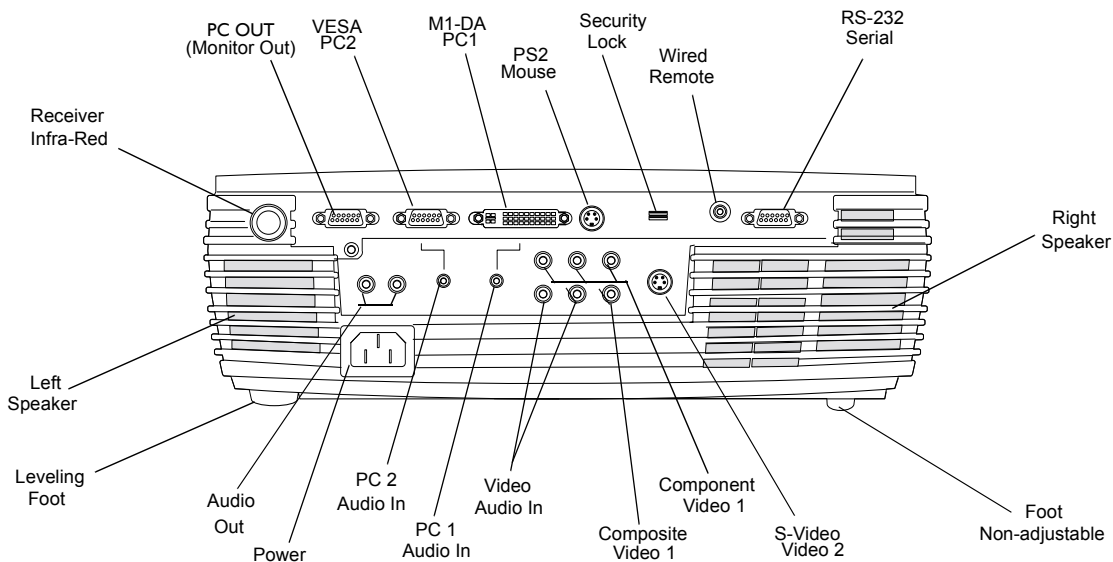




FIGURE 1

Connector Panel

The projector ships with an analog M1 computer cable. If your computer has a digital output, you can order the optional digital computer cable for use with your projector.

- 1 Plug the  connector into the PC1 port on the projector and the VESA  connector into the video connector or monitor on your computer.

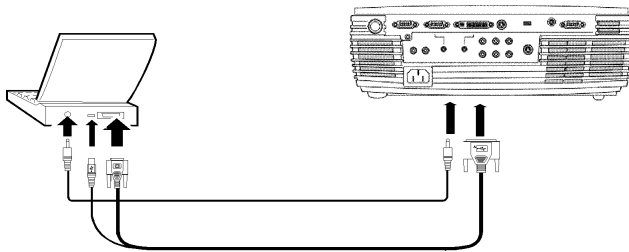



FIGURE 2


Connecting the projector to a computer




Do you want to control the computer's mouse from the projector's remote or keypad?

- 1 Plug the USB  end of the M1-A cable into the USB port on your computer.
 - If your computer uses a PS/2 mouse, do not connect the USB cable to the computer. Connect the PS/2 cable into the PS/2 ports on both the projector and the computer.

Do you want to play your computer's audio on the projector?

- 1 Plug either end of the audio cable into the audio connector on your computer.
- 2 Plug the other end of the cable into the PC 1  audio in connector on the projector.

Connecting an External Speaker

To connect one or two external speakers, plug the speaker cable into the  (audio out) connectors on the projector.

NOTE: The USB mouse is supported for use with Windows 98, Windows 2000, and Apple OS 8.5 and higher only.

Connecting a Computer using a VESA cable

The supplied VESA cable connects to the 15-pin connector on the projector labeled PC 2.

- 1 Locate the cable that connects your monitor to your computer, and unplug it from your computer.
- 2 Plug one end of the VESA cable into the video connector on your computer.
- 3 Plug the other end of the VESA cable into the PC 2 connector on the projector.

To play audio when using the VESA cable, you must connect the audio cable between the projector and the computer. See information on connecting the audio cable on page 15.

Do you want to display the image on your computer's monitor as well as on the projector screen?

To view the presentation on your computer monitor and on the projection screen at the same time, connect the monitor cable to PC Out connector on the projector.

Connecting a Video Player

- 1 If your video player uses a round, one-prong composite video connector, you'll need only the A/V cable that shipped with the projector.

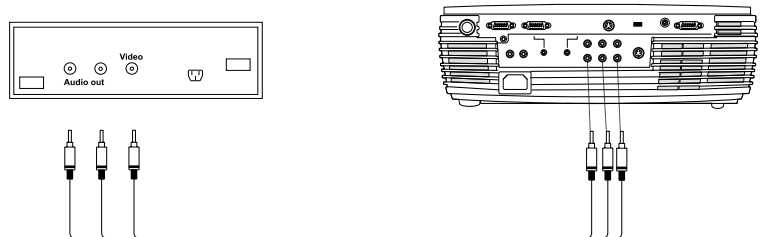


FIGURE 3

Connecting the projector to a video player using the standard video cable.

- If your video player uses a round, four-prong S-video connector, you'll need an S-video cable in addition to the A/V cable. The S-video cable is sold separately. See "Optional Accessories" on page 47.



CAUTION: Your video player may also have a "Video Out" port for a coaxial cable connection. **DO NOT** use this to connect the projector:

-
- 2 Plug the A/V cable's yellow connector into the "video out" port on your video player. This port may be labeled "To Monitor."
 - If you're using an S-video cable, connect it to the "S-video out" connector on the video player.
 - 3 Plug the other yellow connector into the composite connector on the projector.
 - If you're using an S-video cable, the yellow connectors on the A/V cable remain unused. Plug the other end of the S-Video cable into the "S-video" connector on the projector.
 - 4 Plug the A/V cable's red and white connectors into the left and right "audio out" ports on your video player.
 - 5 Plug the other end of the A/V cable's red and white connectors into the left and right "audio in" ports on the projector.

The projector is compatible with these major broadcast video standards: NTSC, NTSC 4.43, PAL, PAL-M, PAL-N, PAL-60 and SECAM. It automatically adjusts to optimize its performance for the incoming video.

Powering on the Projector and Adjusting the Image

- 1 Plug the power cord into the back of the projector, then into your electrical outlet. Use of a surge-protected power strip is recommended. A steady green "Power" LED indicates power is available at the projector.
- 2 Press the Power button on the projector keypad.
 - All fans start to run, and a steady green "Power" LED on the projector changes to a flashing green LED while the projector powers up. The InFocus start-up screen appears.
 - It takes about one minute for the image to achieve full brightness. After the lamp is lit, the "Power" LED changes back to a steady green light.



NOTE: The first time you connect your computer to the projector, the computer may display a message stating that new hardware was found. The Add New Hardware Wizard may appear. Use the Wizard to load the correct driver (the computer considers the projector a Plug and Play Monitor).

3 If you connected a video player, turn it on.

- The video image should display on the projection screen. If it doesn't, press the corresponding source button on the remote (example: PC 1), or from the keypad on the projector, select menu, control and then auto-source. If auto source does not see the source, you can manually select the source. See the "Controls" menu on page 32 for details.
- Use the "Volume + or Volume -" to adjust the sound.

4 Turn on your computer.

- The computer image should display on the projection screen. If it doesn't, press the corresponding source button on the remote (example: PC 1), or from the keypad on the projector, select menu, control and then auto-source. If auto source does not see the source, you can manually select the source. See the "Control Menu, on page 32. Make sure your laptop's external video port is activated. See "Portable and Laptop Activation Chart" on page 48 for details.
- If necessary, make adjustments to the image using the projector's on-screen menus. See "Using the On-Screen Menus" on page 26.

Turning Off the Projector

If you want to turn off the projector for a short period of time, press the "standby" button on the keypad or remote. This blanks the screen for selected standby time, but keeps the projector running.

After the selected standby time, the lamp goes out (the projector keeps running). To exit the standby mode, press the "standby" button again (it may take several seconds for the projection lamp to reach full power and project the image again).

To turn off the projector, press the "Power" button. The LED blinks orange for about a minute while the lamp cools. When the lamp has cooled, the LED changes from a flashing orange to a solid green. After the lamp has cooled, you can unplug the power cord to completely power the unit off.

If you want to turn the lamp back on immediately, you must allow for about one minute for the lamp to cool. The lamp will not re-light if it's too hot.



NOTE: With some computers, the order in which you power up equipment is very important. Most computers should be turned on last, after all other peripherals have been turned on. Refer to your owners documentation to determine the correct order.

USING THE PROJECTOR

This section provides a reference for using the keypad and remote, as well as describing options available through the on-screen menus. This section also describes how to use and make adjustments to the projector for optimum performance.

Basic Image Adjustment

- 1 Make sure you have powered up your equipment in the correct order. See page 17 for details.
- 2 If the image doesn't display completely, adjust the height of the projector, and then center the image horizontally. Now turn the zoom ring until the image fits into the viewing area. Be sure the projector is at a 90 degree angle to the screen.

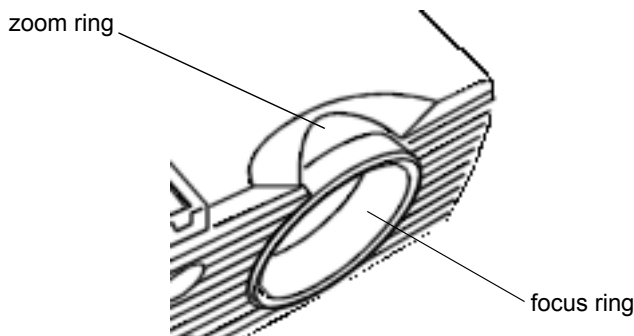


FIGURE 4

Adjusting the zoom and focus on the projector

- 3 If the image is out of focus, rotate the focus lens until the image is sharp.
- 4 If the image appears to shimmer or if it has blurry vertical bars after you have adjusted the focus, turn Auto Image (see details on page 30) off and then back on to reset the automatic sync and tracking. For additional information on adjusting the image, see the "Image Menu" beginning on page 29.
- 5 If the colors don't look bright, adjust the brightness and tint. See the "Display Menu" on page 26.



Using the Remote Control

The LP630 comes with a full featured, multi-functional wireless remote control. The remote can control all projector functions, including some that are found only on the remote, operate your computers mouse, and comes with a laser pointer.

Point the remote control at the projection screen or at the front or rear of the projector (not the computer). The range for optimum operation is about 25 feet. If you point the remote at the projection screen, the distance to the screen and back to the projector should be less than 25 feet. For best results, point the remote directly at the front or rear of the projector.

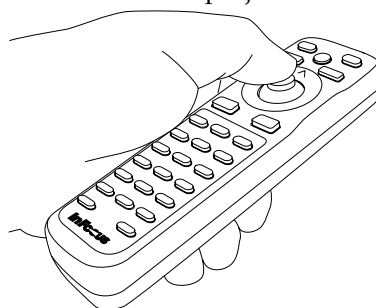


FIGURE 5

Using the remote control

Using the Laser Pointer

To use the laser pointer, aim the remote at the viewing screen and press the laser button. The laser goes off when button pressure is released.

Controlling your computers Mouse with the Remote

To control the computer's mouse using the remote, you must first connect the USB mouse connector (on the M1 cable) to the computer. See page 15 for details.

Apply pressure at any angle to the mouse button to move the cursor. The two buttons below and to the left and right of the mouse button are the left and right mouse buttons. To drag with the mouse, place the cursor in the object to move, press and hold down the left mouse button, and then apply pressure at any angle to the mouse button to move the cursor.

If you have a Microsoft® PowerPoint® presentation, you can use the remote's fwd and bkw buttons to navigate forward and backward through your presentation while in the Slide Show mode.

Adjusting the Projector

The projector is equipped with a self-locking, quick-release elevator foot and button and a leveling knob.

To Raise the Projector

- 1 Press and hold the elevator button.
- 2 Raise the projector to the desired height, and then release the button to lock the elevator foot into position. If necessary, turn the leveling knob at the rear of the projector to adjust the angle of the projected image.

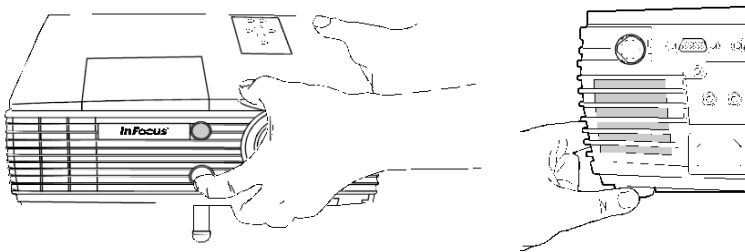


FIGURE 6

Adjusting the height of the projector



CAUTION
LASER RADIATION - DO NOT
STARE INTO BEAM
WAVE LENGTH: 670nm
MAX OUTPUT: < 1mW
CLASS II LASER PRODUCT

Using the Keypad and Remote Buttons to navigate

With either the keypad on the projector or the remote, press the menu button.

On the keypad, use the source/standby buttons to move up and down in the menu. Once a menu selection has been made, press the menu button a second time to highlight the selection, and the volume + - buttons to move within the selection.

On the remote, use the up/down motion on the Disk mouse to move within the menu, press the menu button to highlight it, and the mouse button left/right motion to move within the selection.

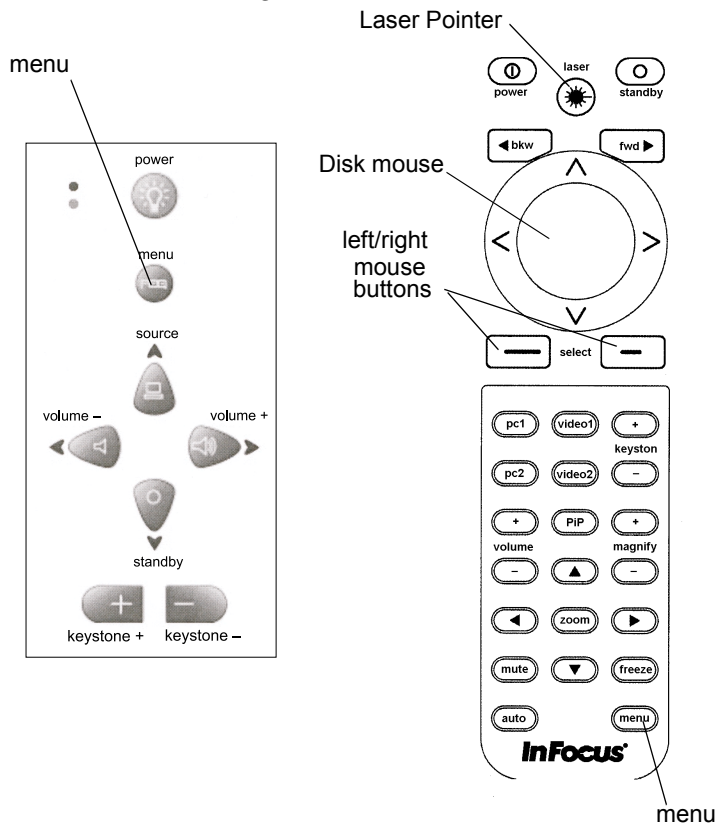


FIGURE 7

Keypad and remote buttons

Using the Projector Keypad

The keypad has eight control buttons; power, menu, source, standby, volume -, volume +, keystone - and keystone +. The source, standby, volume left and volume right buttons double as left, right, up and down buttons when moving through the menus when you're in the menu mode. The arrow buttons can also be used for panning while in the zoom mode, and for window placement in the PIP mode.

Arrow LED's

Green, arrow shaped LED's on the projector keypad are backlit when the projector is in the menu mode, indicating that the four arrow buttons are enabled for menu navigation.

Menus

Press the menu button to display the projector menu. The menu includes the following information:

- **Display** – adjust keystone, brightness, tint, color, color temperature, contrast, and screen color.
- **Audio** – adjust volume, treble, bass, balance and fade. Access to mute sound.
- **Image** – resize (toggle between standard and native image size), overscan, video standard, image position indicates zoom and auto image selection, adjust manual sync, manual tracking, horizontal and vertical image.
- **Control** – set auto source, default source, standby timer and display message.
- **Advanced** – set rear project, ceiling project, screen saver, auto shutdown (time to), display startup screen and reset.
- **Language** – English, French, German, Spanish, Japanese, Chinese, and Korean.
- **Status** – indicates lamp hours used, computer resolution, signal source, speakers (internal/external) and the current software version.

Using the Remote Control

The remote has the same buttons found on the projector keypad, and additional keys found only on the remote.

- **Fwd/Blkw** – used for slide forward and slide backward in presentations created in Microsoft® PowerPoint®.
- **Arrow buttons** – used for panning while in the zoom mode or for window placement in the PIP mode.
- **Disk Mouse** – used in conjunction with the select buttons for menu navigation. The disk mouse becomes the remote mouse when the projector is not in the menu mode. When functioning as a remote mouse, the select buttons represent the left and right mouse buttons.
- **Auto** – used to toggle the Auto Image feature of the projector. This is the equivalent of turning Auto Image off then on again, adjusting and resyncing the image.
- **Menu** – opens the on-screen menu. Press again to close. When you close the menu, any changes you made were saved. For additional information, see page 26.
- **Zoom** – used to zoom in on a specific section of the image projected. You can increase and decrease the zoom, and move around in zoom mode.
- **PIP (Picture in Picture)** – Allows a video image to be overlayed on the main (background) screen. The image size can be changed and contain video from either video source. The video image can be moved anywhere on the screen. The feature is disabled when the PIP is pressed again.

-
- **PC1/PC2** – data sources for the projector. Allows the user to have more than one presentation available during a presentation, drawing information from two sources individually.
 - **Video1/Video2** – video sources for the projector. Allows the user to have more than one video source available during a presentation.
 - **Magnify** – increases or decreases the size of the image being viewed. You must be in the zoom mode to use magnify. When in magnify, you can pan up, down, left and right. You must also be at least one magnification to pan.
 - **Freeze** – freezes the frame of the digital input, allowing for discussion or changing video sources. Does not freeze the video source.
 - **Standby** – turns display and audio off. Displays blank screen for 15 minutes or as set by the user.

If you press **standby** again within 15 minutes or as set by the user, the projector returns to normal operations immediately.

If you don't press **standby** again, the lamp turns off after 15 minutes or as set by the user, and the projector shuts off.

There is a 60 second delay before the lamp can be relit if it was just turned off.

Using the On-Screen Menus

The projector has seven drop-down menus which allow you to make adjustments and changes to a variety of settings. The individual menus have been listed previous. The following is a functional description of each menu item.

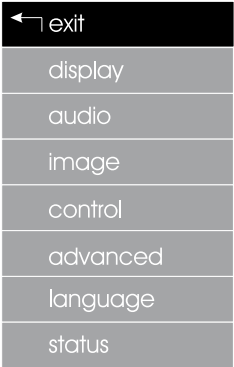



FIGURE 8
Selections available on the projector menu


.....
NOTE: Some menu items may be grayed out (dimmed) at certain times. This indicates the item is not applicable to your setup (for example, video standards do not apply to computer sources) or the item is not enabled until another selection is made (for example, Manual Tracking is not available until Auto Image is turned off).

Display Menu

Use the display menu to adjust keystone, brightness, tint, color, color temperature, and the default screen color.

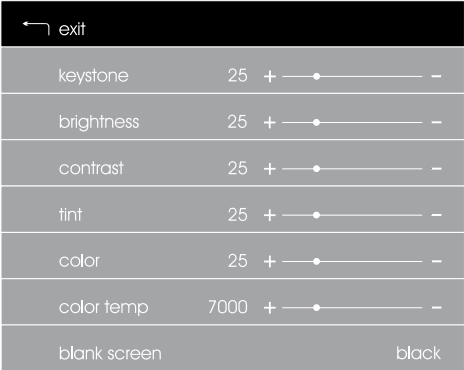


FIGURE 9
Selections available within the display menu

Keystone + –

The keystone buttons correct the distortion that is caused when one edge of the screen is further from the projector lens than the other. This condition could be caused either by a tilted screen or by the screen being above or below the level of the projector lens. Keystone correction works for both data and video sources. The keystone buttons will auto-repeat. A horizontal slider display appears on the screen when keystone is adjusted with the keystone buttons. The slider display provides a graphic indication of the setting from 0 to 100%

Brightness

The brightness selection adjusts the overall intensity of illumination and determines the background level of the projected display. It does not affect the brightness of internally generated images such as the startup screens. Brightness increases when the slider is moved to the right.

Tint

Tint adjusts the red/green balance of the display and determines the color of the projected image. Moving the slider to the left will increase the green. Moving the slider to the right will increase red.

Color

The color selection adjusts the image from black and white to fully saturated color. Saturation increases when the slider is moved to the right.

Color Temperature

The color temperature selection adjusts the white point of the display. In order to achieve pure white the user can manipulate the tone of white from blue-white to yellow (red-green)-white. Color temperature is shifted toward blue when the slider is moved to the right.

Screen Color

When the projector has no display signal, the screen will appear blue (the default), black or white. Select screen color and then use the mouse left/right motion on the remote or the volume +/- on the keypad to toggle between the three available choices.

Audio Menu

The audio menu controls the sound of the internal and external speakers.

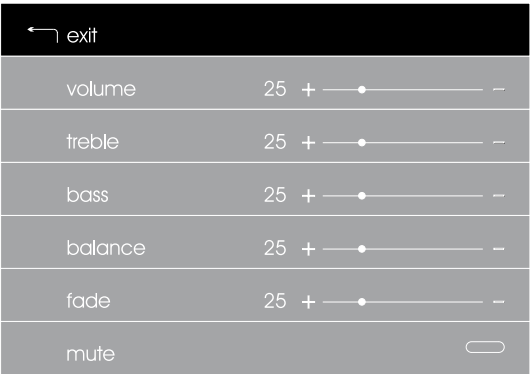


FIGURE 10
Selections available within the audio menu

Volume

The volume selection adjusts the volume of the internal and external speakers (if connected). Volume is increased when the slider is moved to the right.

Treble

The treble selection adjusts the treble tone, or high frequency, of the audio output. The treble setting applies to both internal and external speakers. Treble content increases when the slider is moved to the right.

Bass

The bass selection adjusts the bass tone, or low frequency, of the audio output. The bass setting applies to both internal and external speakers. Bass content is increased when the slider is moved to the right.

Balance

The balance selection controls the balance between the left and right internal and external speakers.

Fade

The fade selection controls balance between the internal and external speakers. If no external speakers are connected, the selection will appear grayed out.

Mute

Indicates whether mute is enabled (green light) or disabled (no light). Mute status is affected by reset or by removing power from the projector, but is not affected in the standby mode. Mute is active while in the freeze mode.

Image Menu

The image menu controls the position, tracking and sync of the projected image. The menu will appear different if the source is video or from a computer input. The manual controls are only available when an analog computer is the active source and auto image is off. The manual controls are not available in the video mode since video is always set automatically.

exit	
resize	standard
zoom	
auto image	
manual sync	50 — ● — +
manual tracking	50 — ● — +
horizontal position	50 — ● — +
verticle position	50 — ● — +

FIGURE 11

Selections available within the image menu

Resize

Resize allows you to select from among four different re-sizing options, depending on your source. The default is **Standard**, which resizes the image from its original version to fit a standard 4x3 aspect ration screen. **Widescreen Letterbox** preserves the 16x9 aspect ratio of the original theater version. **Enhanced Wide-screen** also preserves the aspect ratio and is designed to be used with content enhanced for Widescreen TVs. This option yields more detail than Widescreen Letterbox. **Native** displays the image with no resizing.

Zoom

The zoom menu feature allows a selected area of the screen to be magnified. There is a dedicated zoom button on the remote for the zoom feature. The zoom button will initiate the zoom mode anytime it is pressed, except while in the menu mode. If the remote is not available, zoom can be initiated from the image menu, using the menu button on the projector keypad. The menu button will remain active while in the zoom mode. Zoom is cancelled if the source is changed, the signal lost, the projector placed in standby, or the projector is powered off.

Zoom mode consists of two parts, magnify and pan. Magnify is the part that allows closer viewing of a certain portion of the screen; pan is the part that determines what portion of the screen will be magnified. Magnify has a dedicated set of two buttons on the remote, magnify + and magnify -. Pan is controlled with the arrow buttons on the remote. Both the magnify buttons and the arrow buttons are always active in the zoom mode.

To cancel the zoom mode, press the zoom button on the remote or select it via the image menu on the projector keypad.

Auto Image

The auto image selection is a toggle button that will turn the auto image ON or OFF. When auto image is ON, and the source is an analog computer, the system will automatically adjust the tracking and sync. When auto image is disabled, the best known mode will be applied to the signal and the user will have the option to adjust manual sync, manual tracking, horizontal and vertical position.

Video Standard (Video source only)

The video standard selection allows the user to manually select among various video standards or to choose Automatic Video Standard Detection.

Overscan (Video source only)

When a video source is selected, the overscan feature turns off the cropping of the video signal that is normally done for VCR inputs so that the full image can be seen with DVD.

Image Position

When the resize mode is set to anything other than resize standard, the vertical position of the image can be changed. The three options are top, bottom, and center. Image position is grayed out when the resize mode is resize standard.

Manual Sync

The manual sync selection adjusts the position of the sample within a pixel (picture element or dot) in the image. The start position and range are specific to the source and are determined by the auto image feature when the projector locks to a source; this is true even when auto image is turned off. When the auto image is on, the manual sync selection will appear grayed out. Auto image must be turned off to adjust the sync manually. The manual sync selection will also appear grayed out if the active source is video.

Manual Tracking

Tracking is the number of samples per line. The start position and range are specific to the source and are determined by the auto image feature when the projector locks to a source; this is true even when auto image is off. When auto image is on, the manual sync selection will appear grayed out - Auto image must be turned off to adjust the sync manually. The manual sync selection will also appear grayed out if the active source is video.

Horizontal Position

The horizontal position selection positions the projected image on the screen, side to side. The start position and range are specific to the source and are determined by the auto image feature when the projector locks to a source; this is true even when auto image is off. When auto image is on, the horizontal position will appear grayed out. Auto image must be turned off to adjust the position manually. The horizontal position selection will appear grayed out if the active source is video.

Vertical Position

The vertical position selection sets the projected image on the screen, up and down. The start position and range are specific to the source and are determined by the auto image feature when the projector locks to a source; this is true even when auto image is off. When auto image is on, the vertical position selection will appear grayed out - Auto image must be turned off to adjust the position manually. The vertical position selection will also be grayed out if the active source is video.

Control Menu

These controls are used primarily for the installation and setup and are not frequently used during normal operation.

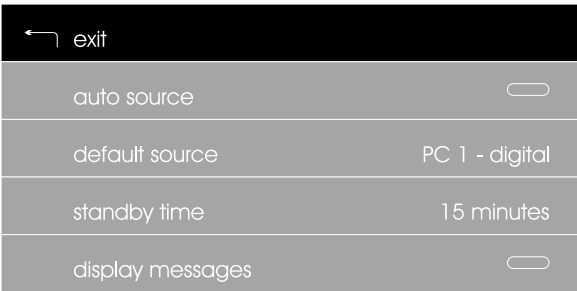


FIGURE 12
Selections available within the Control Menu

Auto Source

If auto source is OFF, the projector will stay on the default source (or current source if the user had changed sources).

If auto source is ON, the projector will search for a source until a signal is detected. When the signal is lost, the projector will again search for another signal, until a signal is again detected and then display that signal. If no signal is obtained, the screen will go blank.

Default Source

Sets the source the projector will first try to lock onto if auto source is ON. If auto source is OFF, the default source selection determines the only source the projector will look at.

Standby Time

The standby time selection allows the user to manually select the amount of time the unit will remain in standby before powering down.

Display Messages

The messages selection is a menu toggle that changes between ON and OFF. When the feature is on, a status message will appear in the lower right corner of the screen. Also a slider bar will appear in the lower right of the screen if keystone or volume is adjusted from either the projector keypad or remote. The message will remain on for five seconds after it is initiated.

Advanced Menu

The advanced menu is an array of miscellaneous controls. Most of these controls are used primarily for installation and setup and are not frequently accessed during operation.

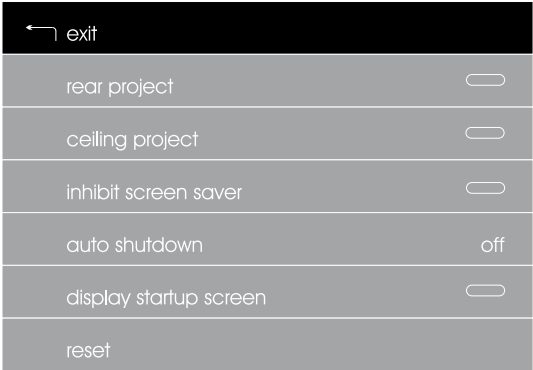


FIGURE 13

Selections available within the Advanced Menu

Rear Project

When you turn rear project on, the projector reverses the image so you can project from behind a translucent screen. Highlight rear project and then use the left or right mouse button on the to toggle this feature ON or OFF.

Ceiling Project

When you turn ceiling project on, the projector turns the image upside down for ceiling-mounted projection. Highlight ceiling project, then use the left or right mouse button on the remote to toggle this feature ON or OFF.

Inhibit Screen Saver

You can control the functionality of your screen saver selection, between ON and OFF. This feature prevents the computers screen saver from interrupting presentations.

Auto Shutdown

The auto shutdown time selection allows the user to manually select the amount of time the projector will remain on with no signal detected, before powering down. Selecting the OFF option will disable this feature.



CAUTION: *When the projector is ceiling mounted, you must affix the Caution Label (included in the document packet) to the lamp door.*

Display Startup Screen

The display startup screen determines whether the default screen is the standard InFocus screen or a blank screen.

Reset

The reset selection resets many of the controls to their default settings. Items which will not be reset include language, ceiling projection, standby time, auto shutdown time, rear projection, and keystone.

Language Menu

This menu allows the user to select a specific language that all other menus and text will appear.

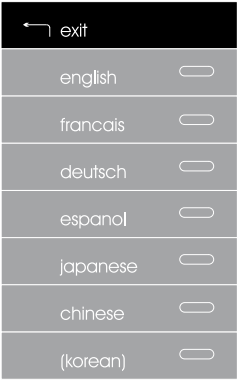
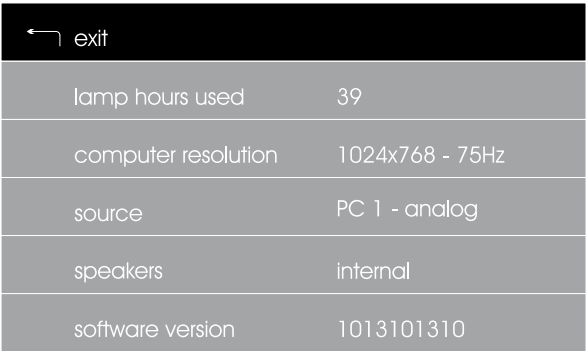


FIGURE 14

Selections available within the Language Menu

Status Menu

This a read-only window for information purposes.



lamp hours used	39
computer resolution	1024x768 - 75Hz
source	PC 1 - analog
speakers	internal
software version	1013101310

FIGURE 15

Selections available within the Status Menu

Lamp Hours Used

Indicates how many hours the current lamp has been in use. The counter starts at zero hours and counts each hour the lamp is in use. Change the lamp when the brightness is on longer acceptable. See Replacing the Projection Lamp on page 37.

Computer Resolution

Shows your computer’s resolution settings. To change this, go to your computer’s control panel and adjust the resolution in the display tab. See your computer’s user’s guide for details.

Source

Indicates the current, active source of the signal being provided to the projector.

Speakers

Indicates whether the projector is using internal, external, or no speaker source.

Software Version

Indicates the current version of software installed on the projector.

MAINTENANCE & TROUBLESHOOTING

This section describes how to:

- clean the lens
- replace the projection lamp
- replace the batteries in the remote
- clean the fan intake filter
- use the security lock feature
- troubleshoot the projector

Cleaning the Lens

- 1 Apply a non-abrasive camera lens cleaner to a soft, dry cloth.
 - Avoid using an excessive amount of cleaner, and don't apply the cleaner directly to the lens.
 - Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.
- 2 Lightly wipe the cleaning cloth over the lens in a circular motion.
- 3 If you don't intend to use the projector immediately, replace the lens cap.

Replacing the Projection Lamp

The lamp hour counter in the Status menu counts the number of hours the lamp has been in use. Change the lamp when the brightness is no longer acceptable. You can order new lamp modules from your InFocus dealer. See "Optional Accessories" on page 47 for ordering information.

Follow these steps to replace the projection lamp:

- 1 Turn off the projector and unplug the power cord.
- 2 Wait at least 30 minutes to allow the projector to cool completely.
- 3 Using the special tool provided, carefully depress the locking mechanism while sliding the cover forward.



WARNING: For ceiling installation. To prevent eye injury, wear protective eyewear before opening the lamp door.



WARNING: To avoid burns, allow the projector to cool for at least 30 minutes before you open the lamp module door. Never extract the lamp module while the projector is operating.



WARNING: Be extremely careful when removing the lamp module. In the unlikely event that the bulb ruptures, small glass fragments may be generated. The lamp module is designed to contain these fragments, but use caution when removing the lamp module.



WARNING: For ceiling installation. To prevent eye injury, wear protective eyewear before opening the lamp door.



CAUTION: Never operate the projector with the lamp door open or removed. This disrupts the air flow and causes the projector to overheat.



WARNING: Do not drop the lamp module or touch the glass bulb. The glass may shatter and cause injury.

- 4 Slide the lamp door forward and off the projector.
- 5 Loosen the two silver, non-removable screws on the sides of the module.

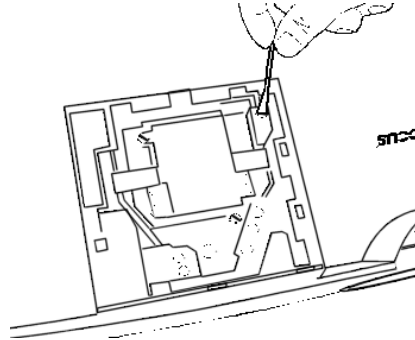


FIGURE 16

Loosen the two silver screws securing the lamp to the projector

- 6 With the thumb and forefinger, grasp the lift tabs on the module and lift the lamp module up and out of the projector. Dispose of the lamp module in an environmentally proper manner.

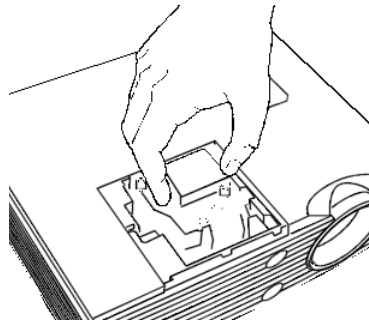


FIGURE 17

Removing the lamp from the projector

- 7 Install the new lamp module, being careful to align the connectors properly.
- 8 Press down on the lamp module until it snaps firmly into place.

-
- 9 Tighten the screws on the outside of the module.
 - 10 Slide the lamp cover back into place.
 - 11 Plug in the power cord and press the Power button to turn the projector back on.
 - 12 The lamp hours status will change automatically when the lamp module is replaced. Verify that the counter was reset by pressing the menu button and viewing the counter in the status window.

Replacing batteries in the remote

The life of the batteries depends on how often and how long you use the remote. Symptoms of low battery charge include erratic responses when using the remote and a reduced range of operation.

Follow these steps to replace the batteries:

- 1 Turn the remote face down in your hand.
- 2 Slide your fingernail under the battery cover locking device and lift it off the remote.
- 3 Remove the old batteries and dispose of them in an environmentally safe manner.
- 4 Install two new AA alkaline batteries.
- 5 Place the battery cover back onto the remote and snap it back into place.



NOTE: Make sure the positive and negative ends of the batteries are installed in the correct direction.

Cleaning the Fan Intake Filter

The fan intake filter on the bottom of the projector catches dust and particles in the air. If the filter becomes clogged, the projector does not cool properly and may malfunction. To prevent this, clean the filter every 100 hours of use.

- 1 Turn off the power and unplug the power cord.
- 2 Slide the filter door forward off the bottom of the projector.

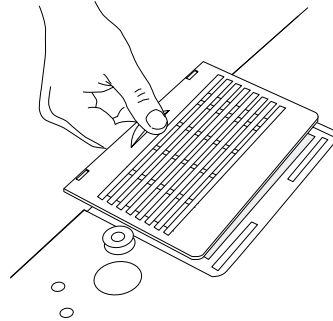


FIGURE 18

Removing the fan intake filter.

- 3 Clean the filter
 - Use a vacuum cleaner set on low power to remove the dust and dirt.

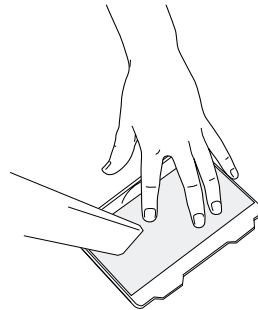


FIGURE 19

Cleaning the fan intake filter.

- 4 Replace the filter door.
 - Slide the door back in place.

Using the Security Lock

The projector has a security connector for use with a PC Guardian Cable Lock System. See “Optional Accessories” on page 47 for ordering instructions. Refer to the information that came with the lock for instructions on how to use it to secure the projector.

Troubleshooting

Problem: The projector is not running

- Make sure that the power cord is properly connected to a fully functional AC electrical outlet. Make sure that the power cord is also properly connected to the projector.
- If the projector is plugged into a power strip, make sure the power strip is plugged in and turned on.
- Make sure the projector is turned on.

Problem: Projector is running, but nothing appears on the projection screen

- Make sure you have removed the lens cap on the projection lens at the front of the projector.
- Make sure the lamp has not burned out. See “Replacing the Projection Lamp” on page 37.
- Check the projector’s lamp to ensure that it is securely connected in the lamp module. Make sure the lamp door is installed. See “Replacing the Projection Lamp” on page 37.

Problem: Only the start-up screen displays

- Verify that the cables are connected correctly. See page 14 for connection procedures.
- Make sure that the cables do not have any bent pins.
- Verify that the proper input source is connected. See page 14 for selecting a source.
- You might need to turn everything off and power up the equipment again in the proper order. Refer to your computers documentation to determine the correct order.

- Make sure that your laptop's external video port is turned on. See the "Portable and Laptop Activation Chart" on page 48 or your computer's manual for details.
- Make sure your computer's video board is installed and configured correctly.
- Make sure your computer has a compatible video board. The projector isn't CGA or EGA compatible.

If you're using Windows 98:

- 1 Open "My Computer" icon, the Control Panel folder and the Display icon.
- 2 Click the Settings tab.
- 3 Verify that the Desktop area is set to 1280x1024 or less.

Problem: Color or text not being projected

- You might need to adjust the brightness up or down until the text is visible. Refer to "Brightness" on page 27 for additional instructions.

Problem: The screen resolution is not right

- Make sure the computer's video card is set for a resolution of no greater than 1280x1024.

Problem: Image isn't centered on the screen

- Move the projector to reposition the image.
- Reposition the image using the menu. Refer to "Horizontal position" on page 31 and "Vertical position" on page 31.
- Be sure the projector is at a 90 degree angle to the screen.

Problem: Image is too wide or narrow for screen

- Adjust the zoom or projector placement.
- Adjust the resolution of your video card if it's greater than 1280x1024.

Problem: Image is out of focus

- Turn the projection lens to focus the image.
- Make sure the projection screen is at least 4.8 feet (1.5m) from the projector.
- Check the projection lens to see if it need cleaning.

Problem: Image and menus are reversed left to right

- Rear projection mode is probably turned on. Turn Rear Projection off in the Controls menu. The image should immediately return to forward projection. See “Rear Project” on page 33.

Problem: The projector displays vertical lines, “bleeding” or spots

- Adjust the brightness. See “Brightness” on page 27.
- Check the projection lens to see if it needs cleaning.

Problem: No sound

- Adjust the volume.
- Verify audio/input connections.
- Adjust audio source.
- Make sure “Mute” is not selected in the audio menu.

Problem: Image is “noisy” or streaked

Try these steps in this order.

- 1 Deactivate the screen saver on your computer.
- 2 Turn Auto Image off and then back on again. See “Auto Image” on page 30.
- 3 Turn Auto Image off and adjust the synchronization and tracking manually to find an optimal setting. See “Manual Syncn” on page 31, and “Manual Tracking” on page 31.
 - The problem could be with your computer’s video card. If possible, connect a different computer.

Problem: Projected colors don’t match the computer or video players colors

- Just as there are differences in the displays of different monitors, there are often differences between the computer image and the projected image. Adjust the brightness and tint from the Display menu. See “Brightness” on page 27 and “Tint” on page 27.

Problem: Lamp seems to be getting dimmer

- The lamp begins to lose brightness when it has been used for a long time. Replace the lamp as described in “Replacing the Projection Lamp” on page 37.

Problem: Lamp shuts off

- A minor power surge may cause the lamp to shut off. Unplug the projector, wait a minute, then plug it back in.
- Make sure the vents are not blocked.

Problem: The projector runs a long time after I turn it off

- The projector filter may be clogged and need cleaning. See Cleaning the Fan Intake Filter on page 40.

The most current troubleshooting information can be found in the Service and Support section of our website at **<http://www.infocus.com/service>**. You'll also find a Technical Library, FAQ's, and support contacts including a technical support e-mail form.

Before calling your dealer or InFocus Technical Support for assistance, please have the following information available:

- the projector's serial number (located on the bottom label)
- the resolution of your computer.

Call InFocus Technical Support at **1-800-799-9911** between 6 a.m. and 6 p.m. PST Monday through Friday. Service is available in North America after hours and on weekends for a fee at 1-888-592-6800.

In Europe, call InFocus in The Netherlands at **(31) 35-647-4010** between 8 a.m. and 6 p.m. Central European Time.

In Asia, call **(65) 332-0659** between 9:30 a.m. and 5:30 p.m.

Or, send us an e-mail at **techsupport@infocus.com**

APPENDIX

Specifications

The projector must be operated and stored within the temperature and humidity ranges specified.

Temperature

Operating	50 to 104° F (10 to 40° C) at sea level 50 to 95° (10 to 35 C) at 7500 feet
Non-operating	-4 to 158° F (-20 to 70° C)

Humidity

Operating and non-oper.	10% to 95% relative humidity, non-condensing
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Dimensions

4.7 x 11 x 13.28 inches (119.5 x 279.5 x 337.4 mm)

Weight

8.9 lbs. (4 kg) unpacked

Altitude

Operating	0 to 10,000 feet (3,048 meters) at 77° F (25° C) 0 to 7500 feet (2,286 meters) at 95° F (35° C)
Non-operating	0 to 20,000 feet (6,096 meters)

Optics

Focus Range	4.9 - 16 feet (1.5-5 m)
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Lamp

Type	200-watt UHP lamp
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Input Power Requirements

100-120V – 8A; 50/60 Hz
200-240V – 4A; 50 Hz



NOTE: Use only InFocus-approved accessories. Other products have not been tested with the projector.

Audio Input

Input Impedance	10K ohm nominal, AC coupled
Maximum Input Voltage	$(L_{IN} + R_{IN})_{PEAK} < 4.5\text{ V}$ for THD $\leq 0.3\%$ L_{IN} or $R_{IN} < 2.0\text{ Vrms}$ for THD $\leq 0.3\%$
Sensitivity	100 mV at 1 KHz for 88 dB SPL at 1 meter
Connector Type	3.5 mm (1/8 inch) stereo phone mini

Accessories

Standard Accessories (ship with the projector)	Part Number
Quick Start card	009-0577-xx
User's Guide	010-0281-xx
Soft Case for LP630	110-0408-xx
MI Analog Computer Cable 6 ft (1.8 m)	210-0185-xx
Audio/Video Cable 6 ft (1.8 m)	210-0053-xx
Computer Audio Cable 6 ft (1.8 m)	210-0118-xx
Ceiling Mount Lamp Door Label	020-1170-xx
VESA HD15 Computer Cable	210-0119-xx
Remote	590-0399-xx
Online User's Guide CD-ROM	010-0282-xx

Power Cords (one ships with projector, type depends on country)

North American Power Cord	210-0023-xx
Australian Power Cord	210-0027-xx
UK Power Cord	210-0028-xx
European Power Cord	210-0029-xx
Danish Power Cord	210-0030-xx
Swiss Power Cord	210-0031-xx

Optional Accessories



NOTE: You can purchase these items by contacting your dealer or InFocus Catalog Sales at 1-800-660-0024.

Deluxe Carry Case	CA-CI32
Shipping Case (ATA approved)	CA-ATA-006
LP630 Ceiling Mount	SP-CEIL-LM630
LiteMount Pipe Tubing Extension	SP-LTMT-EXT BLACK
LiteMount Pipe Tubing Extension	SP-LTMT-EXT GRAY
LiteMount False Ceiling Mount Plate	SP-LTMT-PLT
Audio/Video Cable (30' / 9 meters)	SP-AV30
M1-DA Digital Computer Cable w/USB	SP-DVI-D
S-Video Cable	SP-SVIDEO
15' VGA Extension Cable	SP-VGA15
50' VGA Cable - Domestic	SP-VGA50-D
50' VGA Cable - International	SP-VGA50-I
PC Guardian Projector Lock	SP-LOCK
I-in-2-out VGA Distribution Amplifier	HW-VGA2OUT
Deluxe Wheeled Projector & Computer Cart	HW-CART
Deluxe Insta-Theater Screen 60" Diagonal	HW-DLXSCRN
eBeam (Web Enabled Electronic Meeting Assistant)	HW-EBEAM
Portable Screen 40" Diagonal	HW-PORTSCR40
Portable Screen 50" Diagonal	HW-PORTSCR50
Pull Down Screen 84" Diagonal	HW-WALLSCR84
Portable Projector Stand	SP-STND
Pocket Point RF Remote Control w/Laser Pointer (US, Mexico, Canada Only)	HW-RF-POCKTPNT
GyroMouse Presenter RF Remote Control (US, Mexico, Canada, UK only)	HW-RF-GPRES
GyroMouse Pro RF Remote Control (US, Mexico, Canada, UK only)	HW-RF-GPRO
Remote Point RF with Laser Pointer US, Mexico, Canada, UK only)	HW-RF-REMLSR
LP630 Replacement Lamp	SP-LAMP-LP630
Wired Smart Remote Cable	210-0088-00
3 rd Year Extended Warranty (1 year extension)	EW-1YEAR
4 th Year Extended Warranty (2 year extension)	EW-2YEAR



NOTE: Visit our website at www.infocus.com for the most current activation chart. It is located in the Technical Library in the Service and Support section.




NOTE: You can purchase these items by contacting your dealer or InFocus Catalog Sales at 1-800-660-0024.



NOTE: Usually, pressing the key commands once activates the external video port, pressing it again activates both the external and internal ports, and pressing it a third time activates the internal port. Refer to your computer's documentation for details on your specific model.

Portable and Laptop Activation Chart

Many laptop computers do not automatically turn on their external video port when a projector is connected. Activation commands for some laptop computers are listed in the following table. (If your computer is not listed or the given command does not work, refer to the computer's documentation for the appropriate command.) On many laptop's, the activation function key is labeled with an icon, for example  or the text CRT/LCD.

Computer	Key command to activate port	Key command to de-activate port
Acer	Ctrl-Alt-Esc (for setup)	Ctrl-Alt-Esc (for setup)
AST* **	FN-D or Ctrl-D	FN-D or Ctrl-D
	Ctrl-FN-D	Ctrl-FN-D
	FN-F5	FN-F5
	type from A:/VGA/CRT	type from A:/VGA/CRT
	FN-F12	FN-F12
AMS	FN-F2	FN-F2
AMT	setup screen	setup screen
AT&T	FN-F3	FN-F3
	FN-F6	FN-F6
Advanced Logic Research	Ctrl-Alt-V	Ctrl-Alt-V
Altima	Shift-Ctrl-Alt-C	Shift-Ctrl-Alt-L
	setup VGA/Conf.Simulscan	setup VGA/Conf.Simulscan
Ambra**	FN-F12	FN-F12
	FN-F5	FN-F5
	F2/Choose Option/F5	F2/Choose Option/F5
Amrel* **	setup menu	setup menu
	Shift-Ctrl-D	Shift-Ctrl-D
Apple	see Mac Portable and Mac PowerBook	
Aspen	automatic	automatic
Award	FN-F6	FN-F6
BCC*	automatic	reboot computer

Computer	Key command to activate port	Key command to de-activate port
Bondwell	LCD or CRT options after bootup	reboot for LCD or CRT options to appear
Chaplet**	setup screen	setup screen
	FN-F6	FN-F6
	FN-F4	FN-F4
Chembook	FN-F6	FN-F6
Commax	Ctrl-Alt-#6	Ctrl-Alt-#5
Compaq* **	Ctrl-Alt-<	Ctrl-Alt->
	FN-F4	FN-F4
	automatic	automatic
	mode/? (for setup option)	mode/? (for setup option)
Compuadd* **	automatic	automatic
	Alt-F for screen setup option	Alt-F for screen setup option
Data General	Ctrl-Alt-Command	Ctrl-Alt-Command
Data General Walkabout	2 CRT/X at DOS prompt	reboot
Datavue	Ctrl-Shift-M	Ctrl-Shift-M
DEC**	FN-F5	FN-F5
	FN-F4	FN-F4
Dell**	Ctrl-Alt-<	Ctrl-Alt->
	Ctrl-Alt-F10	Ctrl-Alt-F10
	FN-F8 (CRT/LCD)	FN-F8
	FN-D	FN-D
	FN-F12	FN-F12
Digital*	automatic	reboot
	FN-F2	FN-F2
Dolch	dip switch to CRT	dip switch to LCD
Epson	dip switch to CRT	dip switch to LCD
Everex*	setup screen option	setup screen option
For-A	Ctrl-Alt-Shift-C	Ctrl-Shift-Alt-L
Fujitsu	FN-F10	

Computer	Key command to activate port	Key command to de-activate port
Gateway	FN-F3 FN-F1/FN-F1 again simultaneous	FN-F3 FN-F1
Grid* **	FN-F2, choose auto or simultaneous	FN-F2
	Ctrl-Alt-Tab	Ctrl-Alt-Tab
Hitachi	FN-F7	FN-F7
Honeywell	FN-F10	FN-F10
Hyundai	setup screen option	setup screen option
IBM 970*	automatic	warm reboot
IBM ThinkPad**	reboot, enter setup menu	FN-F2
	FN-F7, select choice from setup menu FN-F1, select choice FN-F5, select choice PS/2 SC select choice (CRT, LCD, etc.)	
Infotel	FN-F12	FN-F12
Kaypro	boot up, monitor plugged in	unplug monitor
Kris Tech	FN-F8	FN-F8
Leading Edge	FN-T	FN-T
Mac Portable 100	no video port: not compatible	
Mac PowerBook		
140, 145, 150, 170	no video port: requires a 3rd-party interface	
160, 165, 180, 520, 540, 5300	Control Panel folder; PowerBook Display folder; Activate Video Mirroring	warm reboot
210, 230, 250, 270, 280, 2300	requires Apple Docking Station or Mini Dock	
Magitronic	FN-F4	FN-F4
Mastersport	FN-F2	FN-F1
Micro Express*	automatic	warm reboot

Computer	Key command to activate port	Key command to de-activate port
Micron	FN-F2	FN-F2
Microslate*	automatic	warm reboot
Mitsubishi	SW2 On-Off-Off-Off	SW2 Off-On-On-On
NCR	setup screen option	setup screen option
NEC* **	setup screen option	setup screen option
	CRT at the DOS prompt	LCD at the DOS prompt
	FN-F3	FN-F3
Olivetti*	automatic	automatic
	FN-O/*	FN-O/*
Packard Bell* **	FN-F0	FN-F0
	Ctrl-Alt-<	Ctrl-Alt->
Panasonic	FN-F2	FN-F2
Prostar	Ctrl-Alt-S at bootup	Ctrl-Alt-S at bootup
Samsung*	setup screen option	setup screen option
Sanyo	setup screen option	setup screen option
Sharp	dip switch to CRT	dip switch to LCD
Sun SPARC-Dataview	Ctrl-Shift-M	Ctrl-Shift-M
Tandy**	Ctrl-Alt-Insert	Ctrl-Alt-Insert
	setup screen option	setup screen option
Tangent	FN-F5	FN-F5
Texas Instruments*	setup screen option	setup screen option
Top-Link* **	setup screen option	setup screen option
	FN-F6	FN-F6
Toshiba* **	Ctrl-Alt-End	Ctrl-Alt-Home
	FN-End	FN-Home
	FN-F5	FN-F5
	setup screen option	setup screen option
Twinhead*	FN-F7	FN-F7
	FN-F5	FN-F5

Computer	Key command to activate port	Key command to de-activate port
	Automatic	Automatic
WinBook	Ctrl-Alt-F10	Ctrl-Alt-F10
Wyse	software driven	software driven
Zenith**	FN-F10	FN-F10
	FN-F2	FN-F2
Zeos**	Ctrl-Shift-D FN-F1	Ctrl-Shift-D FN-F1

* These manufacturers have models that automatically send video to the external CRT port when some type of display device is attached.

** These manufacturers offer more than one key command depending on the computer model.

Using Video Mirroring with a PowerBook Computer

When you turn video mirroring (called SimulScan in newer PowerBooks—see below) on, the projector displays the same information that appears on your PowerBook's built-in screen. When video mirroring is off, the projector acts like a separate display.

To turn on video mirroring for the first time:

- 1 Open the Monitors control panel; click on Monitor 2.
- 2 Set the number of colors you want.
- 3 Open the Control Strip, then click on the monitor icon.
- 4 Select "Turn Video Mirroring On."

Now you can turn video mirroring on and off from the Control Strip without having to open the Monitors control panel again.

When using video mirroring and high color graphics such as slide shows, the projected image occasionally might turn black and white. If this happens, perform the following steps:

- 1 Turn off video mirroring.
- 2 Open the Monitors control panel.
- 3 Move the white menu bar to Monitor 2 to set the projector as the primary monitor.
- 4 Restart the PowerBook.

Using SimulScan

Some newer PowerBooks display images on an external monitor or projector differently than previous ones. When using SimulScan, the projector displays the same information that appears on your PowerBook

To select SimulScan:

- 1 Open the Control Panel, then double-click Monitors and Sound.
- 2 In the Resolution list, choose the SimulScan mode, then click OK.
- 3 If this changes your display settings, a dialog box appears. Click OK to confirm the change.

Projected Image Size

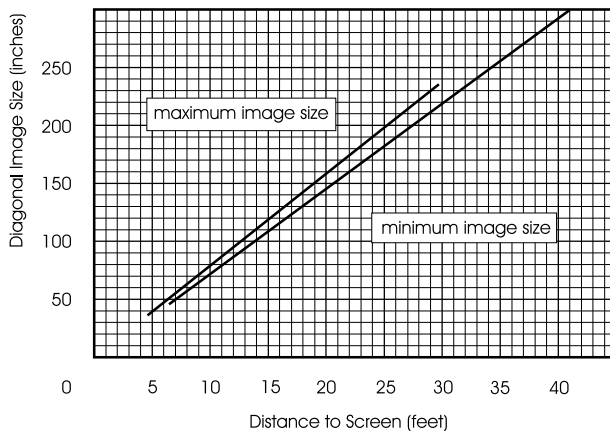


FIGURE 20

Projected image size



NOTE: Use the graph and tables to help you determine projected image sizes.



NOTE: Visit our website at www.infocus.com for an interactive image size calculator. It is located in the Technical Library in the Services and Support section.

**Table 1:
Image Size**

Diagonal Image Size	Image Width	Image Height	Distance to Screen	
			Maximum distance feet	Minimum distance feet
300	240	180	40.3	29.8
240	192	144	32.3	23.8
180	144	108	24.2	17.9
144	115	86	19.4	14.3
120	96	72	16.1	11.9
96	77	58	12.9	9.5
72	58	43	9.7	7.1
60	48	36	8.1	6.0
48	38	29	6.5	4.8

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